

SPECIAL NOTES:

1. PIPES SIZED FOR THE 25-YR STORM EVENT.
2. SEE SHEETS C6.1 TO C6.4 FOR STORM PIPE LAYOUT INFORMATION AND GRADING.

SCALE:
1"=50' HORIZONTAL
1"=10' VERTICAL
EXISTING GRADE
PROPOSED GRADE
STORM SEWER

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1870 Project Number
302-10-002A

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11/29/2010

HUNTSVILLE
The Heart of Alabama

STORM PROFILES

REDSTONE GATEWAY - PACKAGE 1A

CITY OF HUNTSVILLE

HUNTSVILLE, ALABAMA

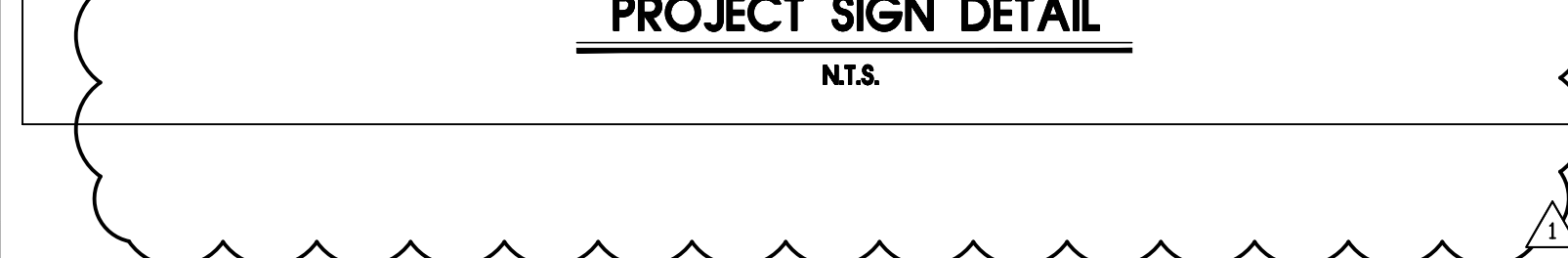
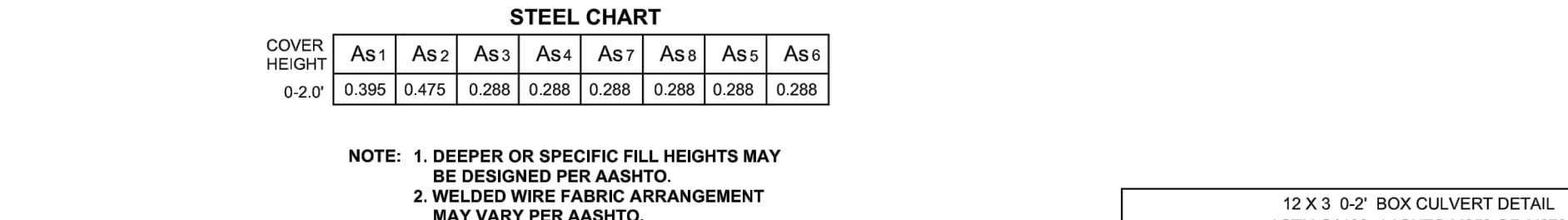
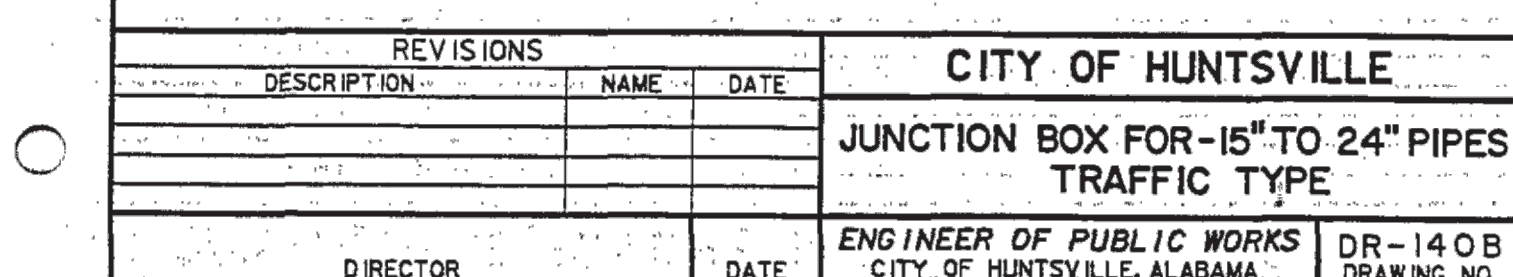
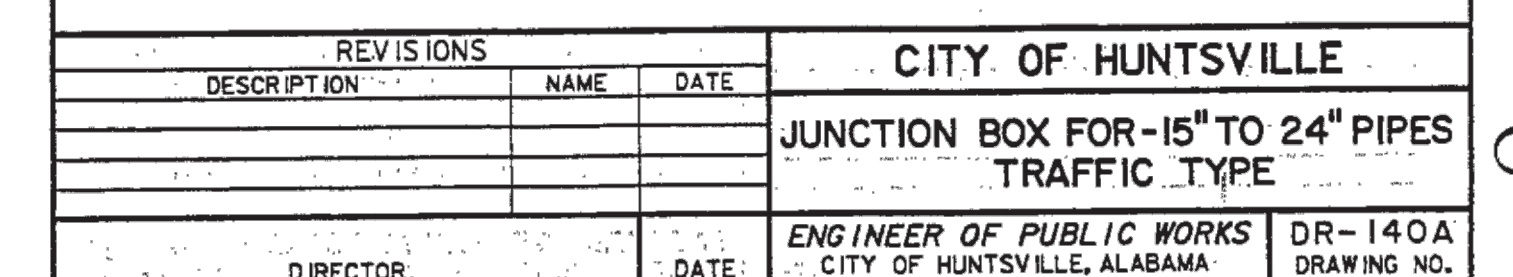
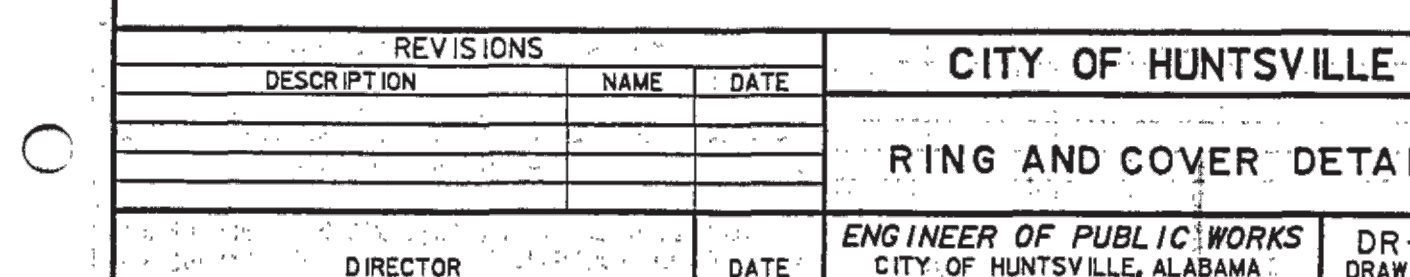
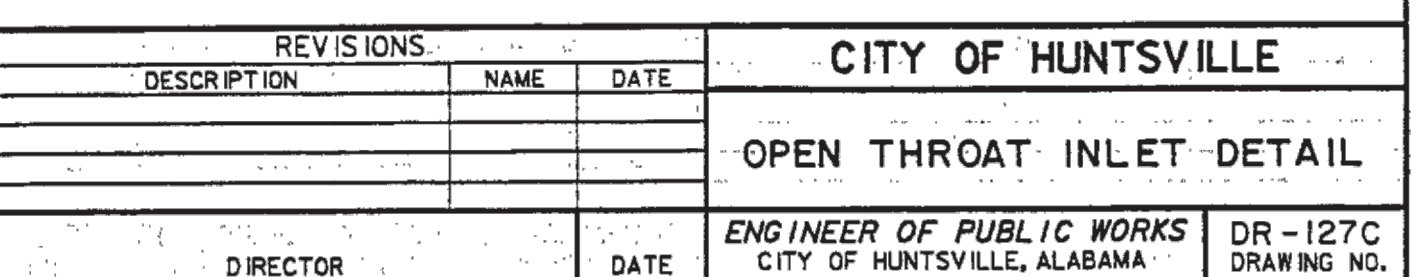
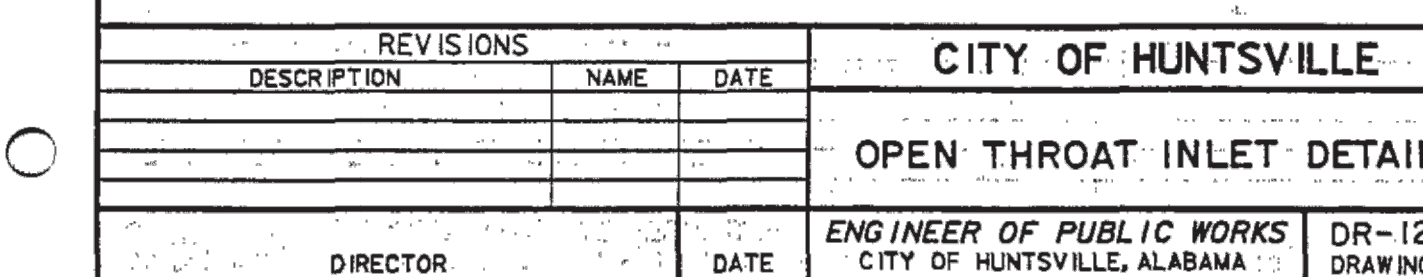
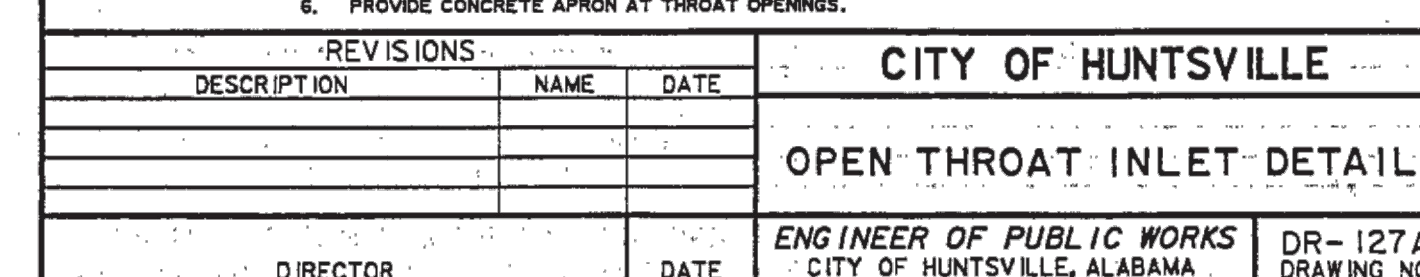
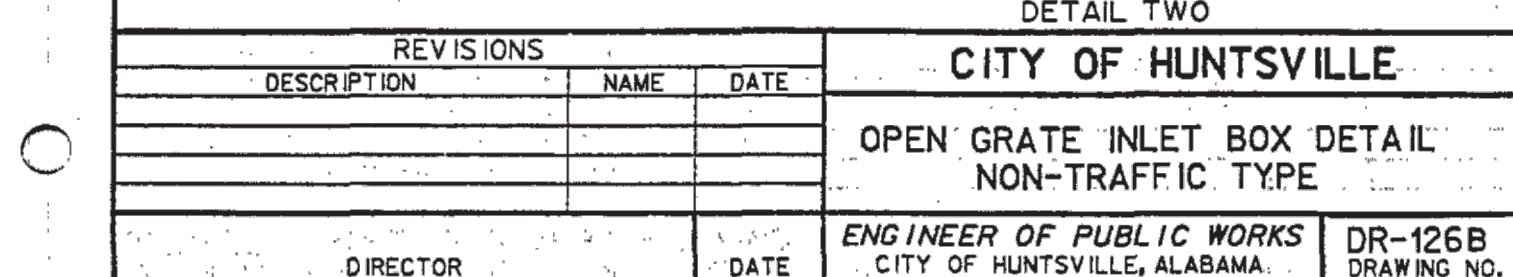
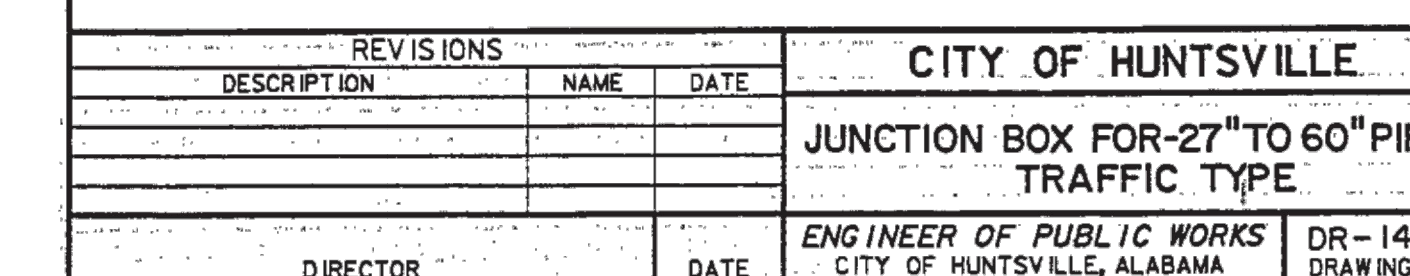
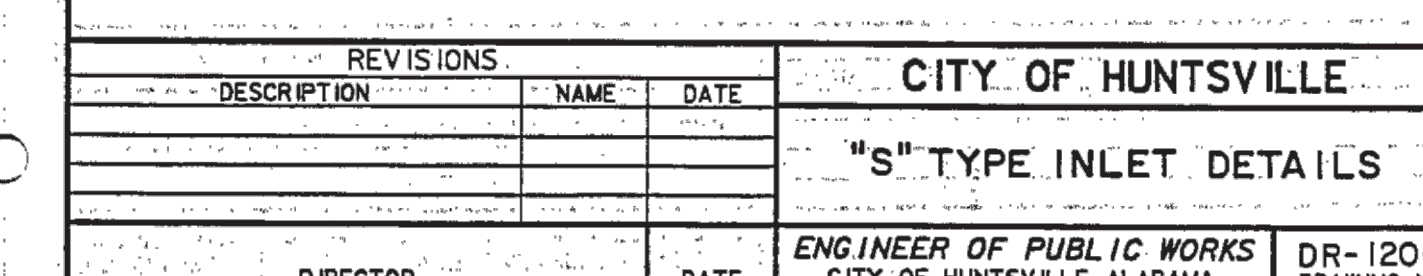
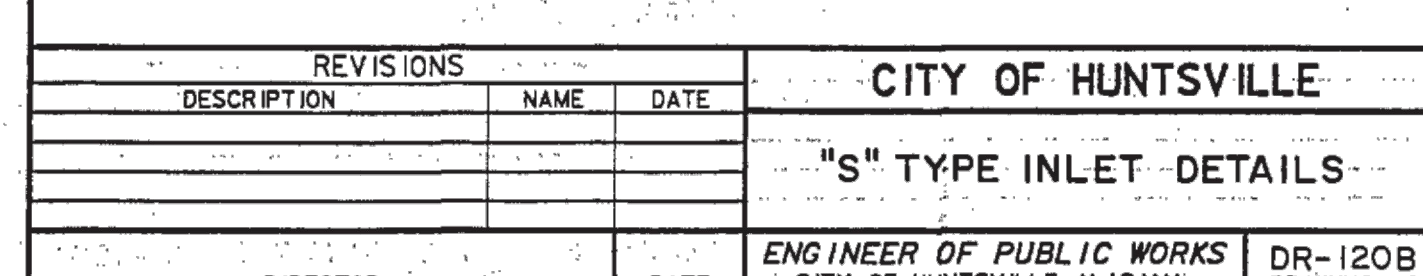
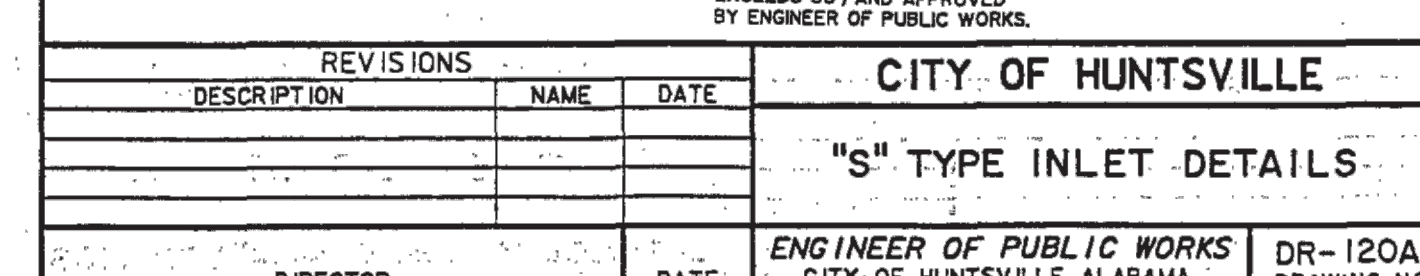
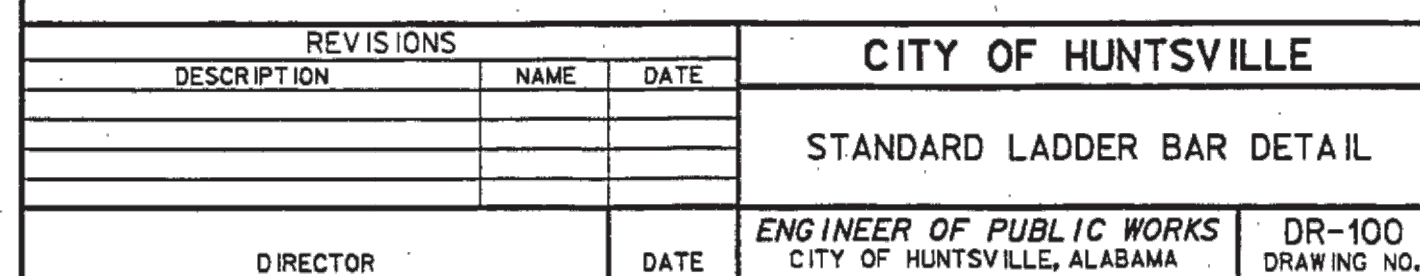
NO.	DATE	BY	CHKD	DESCRIPTION
1	11/29/2010	BSJ	BSJ	FINAL

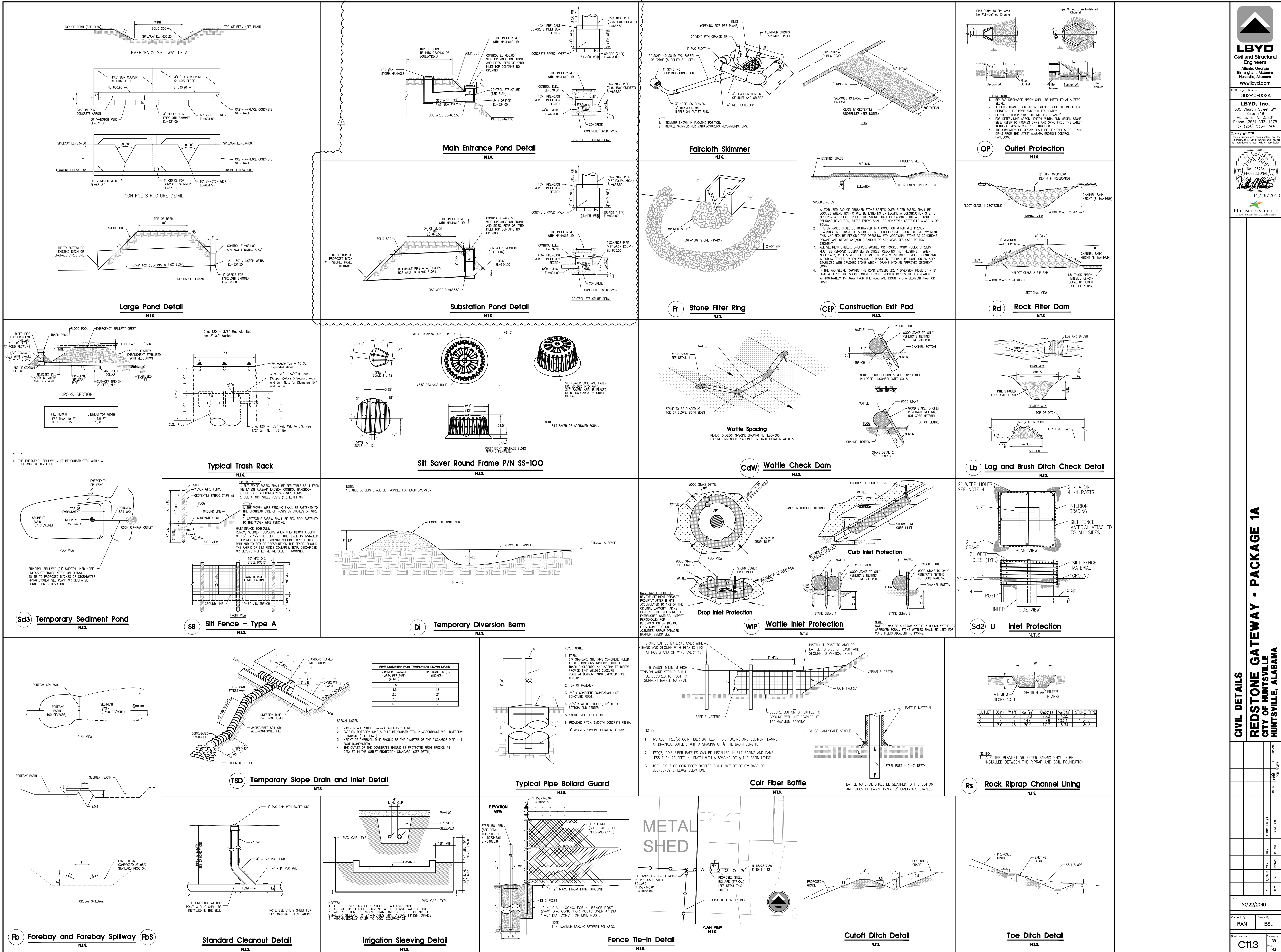
Drawn By: **BSJ**

Checked By: **RAN**

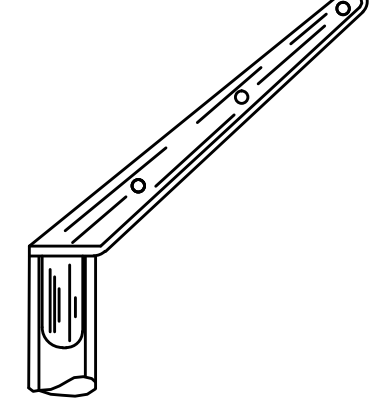
Sheet Number: **C10.0**

Project Number: **302-10-002A**





FOR END AND CORNER POST
MALLEABLE IRON

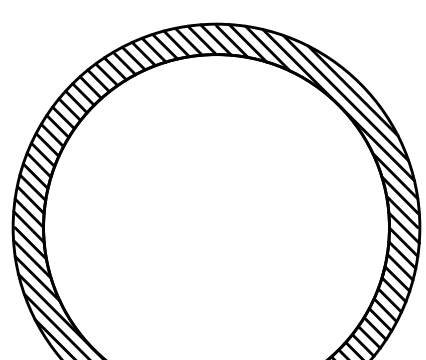


EXTENSION ARM

PRESSED STEEL EXTENSION ARMS, 12 GA. TOP
BARBED WIRE 12" + ABOVE FABRIC AND OUT
FROM FENCE

TOP FINISH OF FENCE

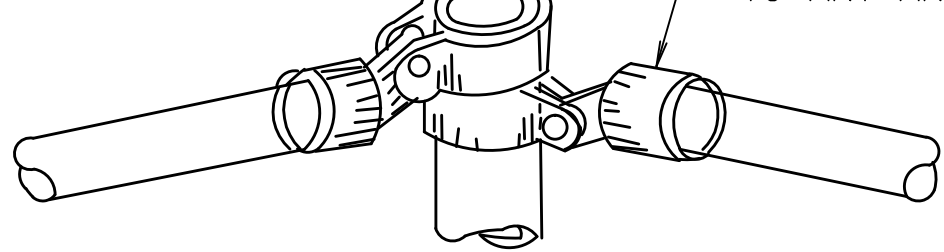
4" O.D. POST 9.1 LBS. PER FOOT-GATE
3" O.D. POST 5.79 LBS. PER FOOT-GATE & CORNER
1 5/8" O.D. BRACE RAIL 2.72 LBS. PER FOOT
2.00" O.D. GATE FRAME 2.72 LBS. PER FOOT
2.375" O.D. LINE POST 3.65 LBS. PER FOOT



H COLUMN LINE POST 4.1 LBS. PER FOOT

POST, BRACES, AND GATE FRAMES

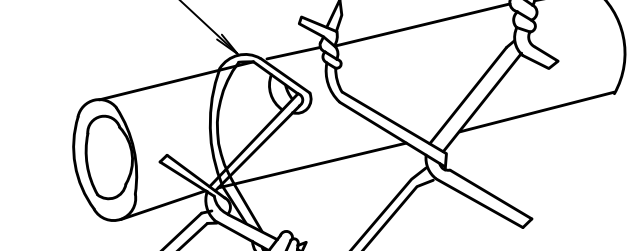
CORNER CLAMP - ADJUSTABLE
TO ANY ANGLE



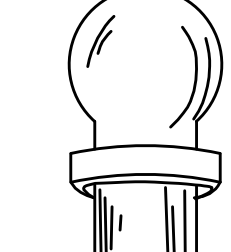
STRETCHER BARS AND
STRETCHER BAR BANDS.

CORNER POST CONNECTIONS

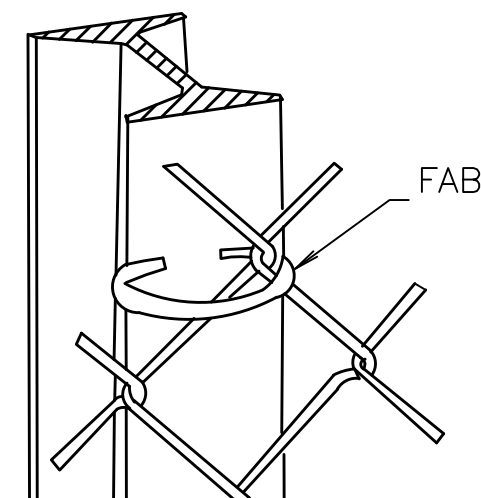
TIE WIRE 12 G



METHOD OF TYING FABRIC



BALL TOP
FOR GATE POST



METHOD OF TYING FABRIC

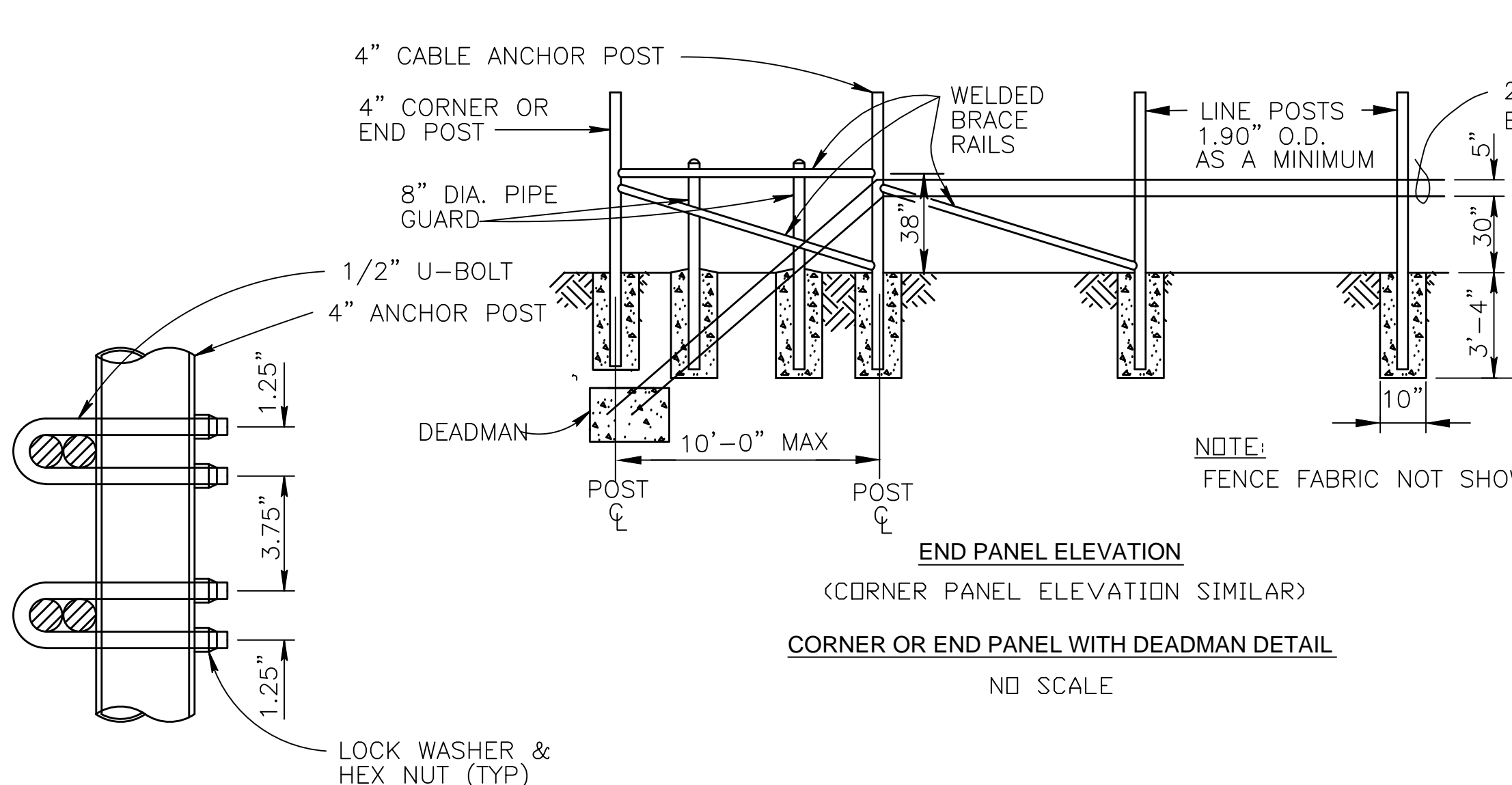
TO DEADMAN

TO DEADMAN

NOTES:
1. WHERE "A" AND "B" CABLES OVERLAP,
USE U-BOLT AT OVERLAPPING CABLES DETAIL.
2. WIRE ROPE CLAMP NOT SHOWN.
3. VERIFY ASSEMBLY BEFORE ORDERING/FABRICATING.

U-BOLT AT CABLE ANCHOR POST DETAIL

NO SCALE

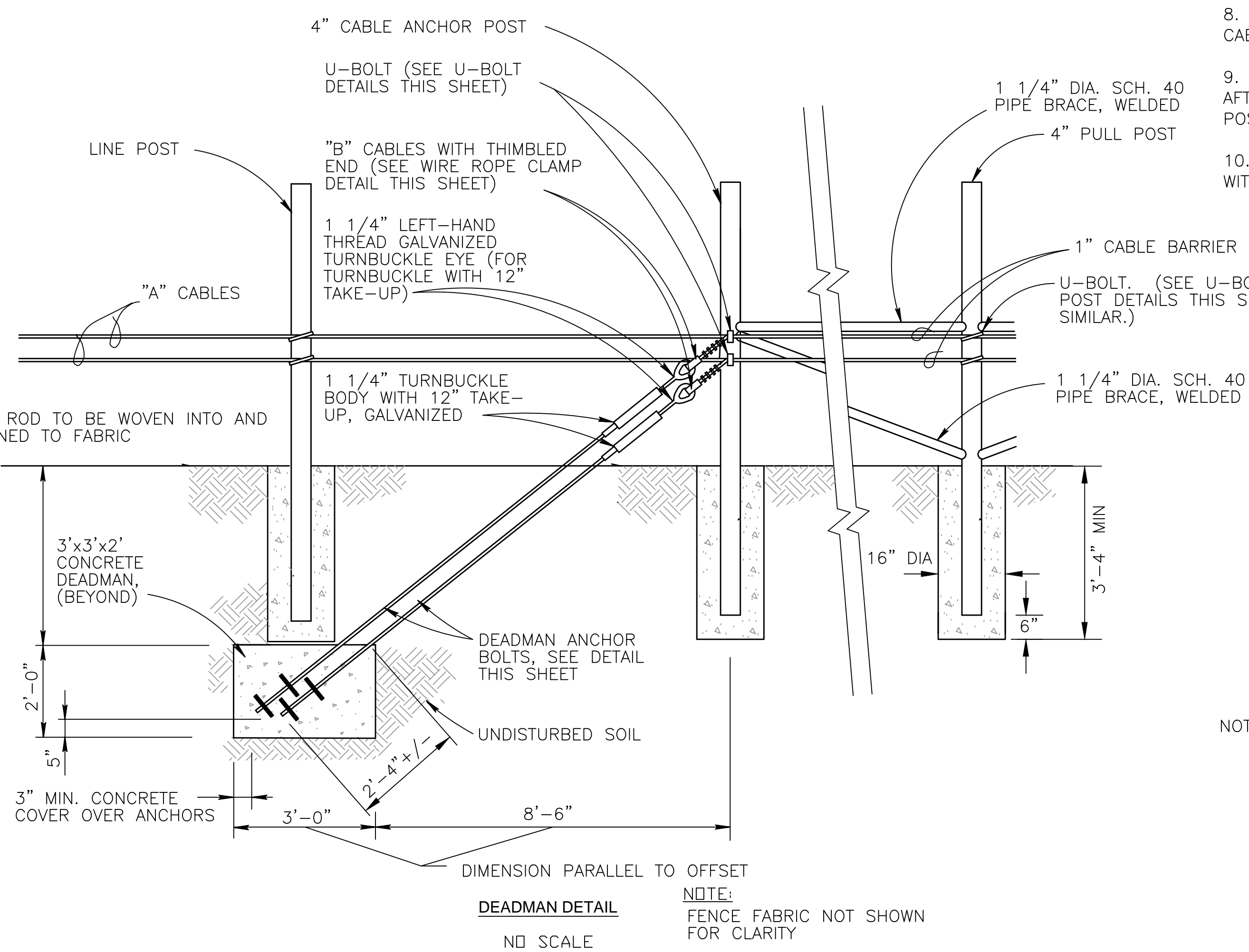


CORNER OR END PANEL WITH DEADMAN DETAIL

NO SCALE

U-BOLT AT OVERLAPPING CABLES DETAIL

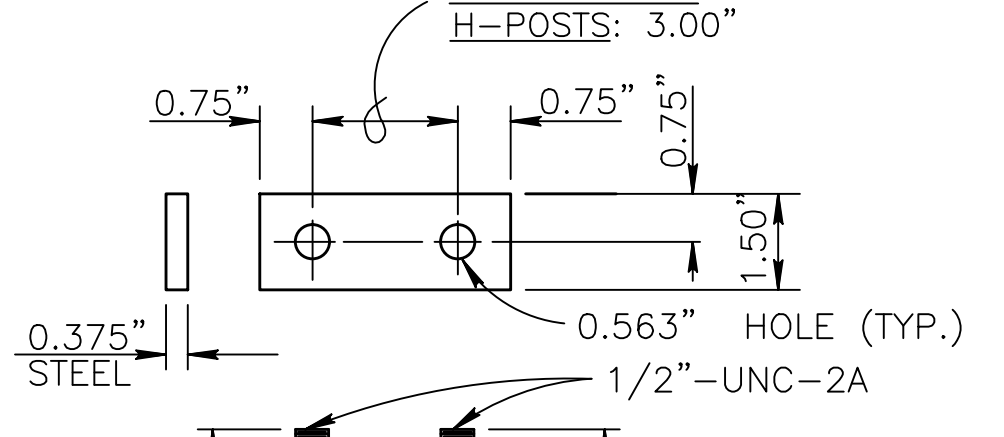
NO SCALE



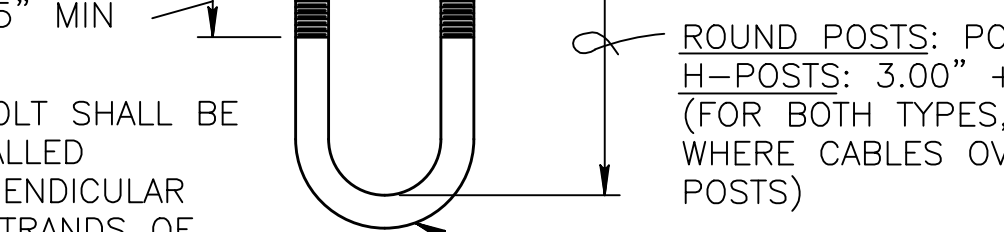
DEADMAN DETAIL

NO SCALE

ROUND POSTS: POST O.D. + 0.875"
H-POSTS: 3.00"

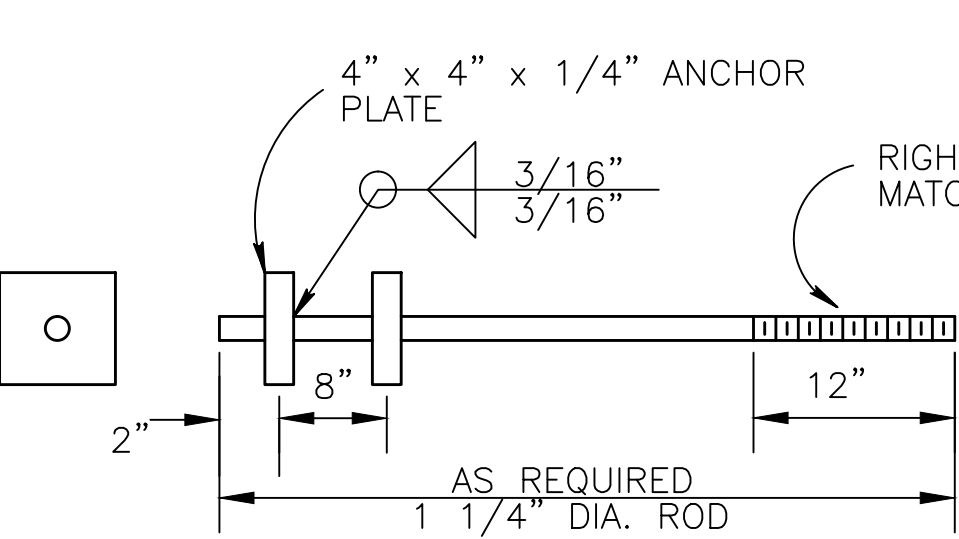


ROUND POSTS: POST O.D. + 1.875"
H-POSTS: 3.00" + 1.875"
(FOR BOTH TYPES, INCREASE 0.75"
WHERE CABLES OVERLAP AT PULL
POSTS)



U-BOLT AT LINE POST DETAILS

NO SCALE



NOTE:
HOT DIP GALVANIZE ANCHOR ASSEMBLY AFTER
FABRICATING.

DEADMAN ANCHOR BOLT DETAIL

NO SCALE

1/2" HOT ROLLED STEEL

0.75" MIN

0.375" STEEL

0.563" HOLE (TYP.)

1/2"-UNC-2A

CLAMP PLACEMENT PER
MANUFACTURER'S
RECOMMENDATIONS

TAIL OF CLAMP
ASSEMBLY SHALL BE
ADJACENT TO POST

EXTRA HEAVY DUTY
WIRE ROPE THIMBLE

1'-6"

4 - WIRE ROPE CABLE
CLAMPS, PEEN THREADS (TYP)

WIRE ROPE CLAMP DETAIL

NO SCALE

DEADMAN

BRACE RAIL
ROD, TYP

WELDED BRACE
RAILS, TYP

PULL POST,
TYP

WELDED BRACE
RAIL, TYP

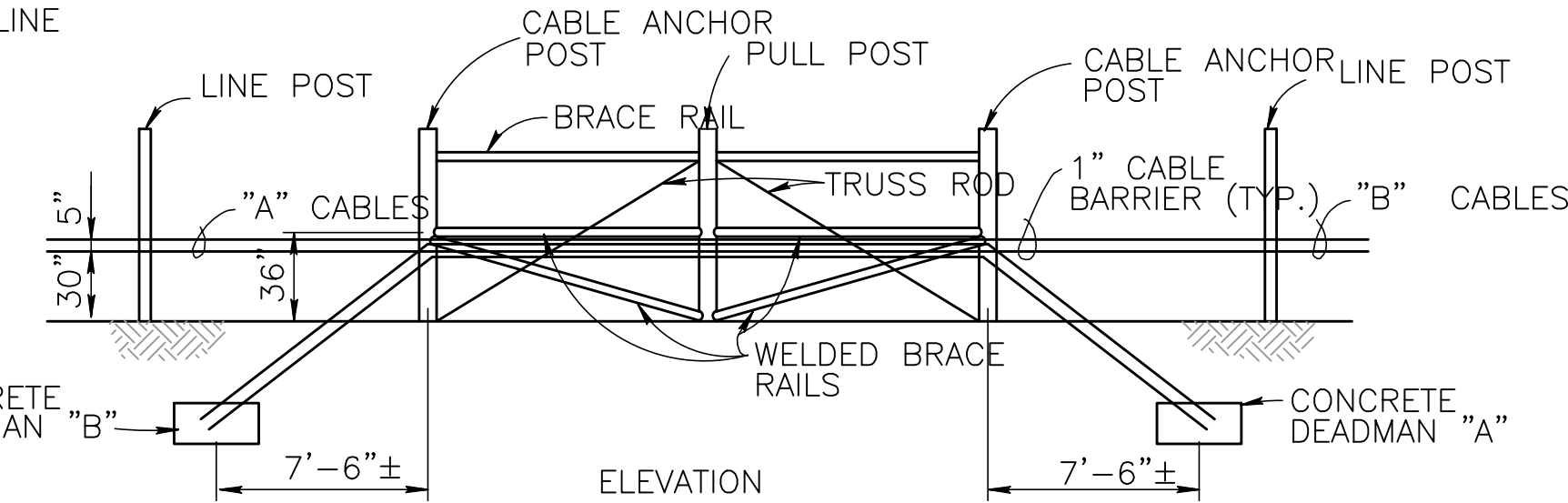
CABLE ANCHOR
POST TYP

LINE POST

CORNER PLAN

GENERAL NOTES:

1. CABLES SHALL BE CONTINUOUS FROM DEADMAN TO DEADMAN. NO SPLICES IN CABLE SHALL BE ALLOWED. CABLE BARRIER SHALL BE INSTALLED BETWEEN FENCE POSTS AND FENCE FABRIC AS PER PLANS. U-BOLTS ON LINE POSTS SHALL BE INSTALLED PERPENDICULAR TO THE STRANDS OF THE WIRE ROPE AND SHALL BE TIGHTENED AFTER SAG IN CABLE BARRIER HAS BEEN REMOVED. BRACE PANELS W/DEADMEN SHALL BE SPACED AT 200' FOOT MAXIMUM INTERVALS AND AT CHANGES IN ALIGNMENT EXCEEDING 45 DEGREES, DEADMAN SPACING IS BASED ON A SPECIFIC VEHICLE WITH A RESULTANT KINETIC ENERGY OF LESS THAN 400 K FOOT POUNDS. FOR LONGER DEADMAN RUNS AN ANALYSIS WILL HAVE TO BE MADE TO DETERMINE EFFECTIVENESS FOR ACCEPTABLE PENETRATION LIMITS.
2. CABLE BARRIER SHALL BE U.S. DOMESTIC 1 INCH 6x19 CLASS WIRE ROPE, REGULAR LAY, EXTRA IMPROVED PLOW STEEL (EIPS), INDEPENDENT WIRE ROPE CORE, (IWRC), CLASS A GALVANIZED, IN ACCORDANCE WITH ASTM A1023/A1023M.
3. EYE TO EYE TURNBUCKLES SHALL BE 1-1/4" X 12", TYPE I, FORM 1 CLASS 4 ZINC COATED, IN ACCORDANCE WITH ASTM F1145.
4. WIRE ROPE CLAMPS SHALL BE TYPE I, CLASS 1, GALVANIZED, IN ACCORDANCE WITH FS FF-C-450.
5. U-BOLTS AND HEX NUTS SHALL BE 1/2", GALVANIZED, IN ACCORDANCE WITH ASTM A307 AND ASTM A563.
6. THREADED RODS SHALL BE 1-1/4", GALVANIZED, IN ACCORDANCE WITH ASTM A307 OR A36.
7. WELDED BRACE RAILS SHALL BE INSTALLED AS PER THE PLANS AND AWS D1.1 (STRUCTURAL WELDING CODE - STEEL) AT CORNER, END, GATE, AND PULL POSTS. DAMAGE TO THE GALVANIZED SURFACE DUE TO WELDING SHALL BE REPAIRED WITH "REPAIR STICKS" OF ZINC-CADMIUM ALLOYS OR ZINC-TIN LEAD ALLOYS AS PER AWS W2C.
8. FOR EXISTING FENCES, REPLACE THE LINE POSTS AT THE BEGINNING AND END OF EVERY CABLE RUN WITH A 4" ANCHOR POST AND 4" PULL POST.
9. DEADMAN OFFSET IS PROVIDED TO ALLOW ACCESS TO TURNBUCKLES FOR FUTURE ADJUSTMENT AFTER FENCE FABRIC IS INSTALLED. IF FENCE FABRIC IS NOT TO BE INSTALLED ON THE BARRIER POSTS, OFFSET MAY BE ELIMINATED AS APPROVED.
10. WHEN FENCE FABRIC IS NOT TO BE INSTALLED, PROVIDE POSTS AND FITTINGS IN CONFORMANCE WITH DETAILS SHOWN ON THIS SHEET AND THE REQUIREMENTS FOR FENCE TYPE FES.



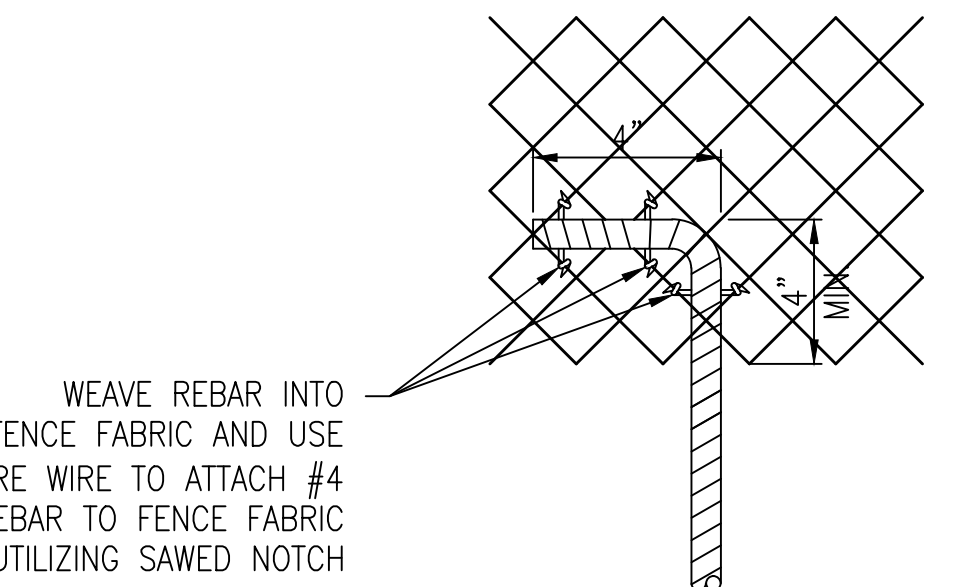
BRACE PANEL W/DEADMAN DETAIL

N.T.S.

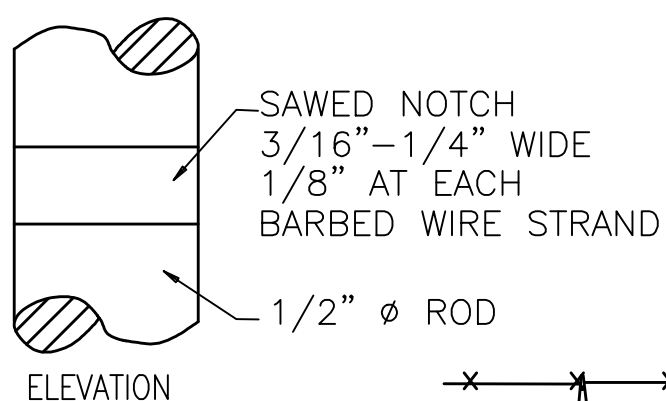
NOTE: CABLE "A" & "B" DESIGNATION IS FOR
CLARIFICATION OF ROUTING OF 1" CABLES.

PLAN

1



METHOD OF TYING REBAR TO FABRIC



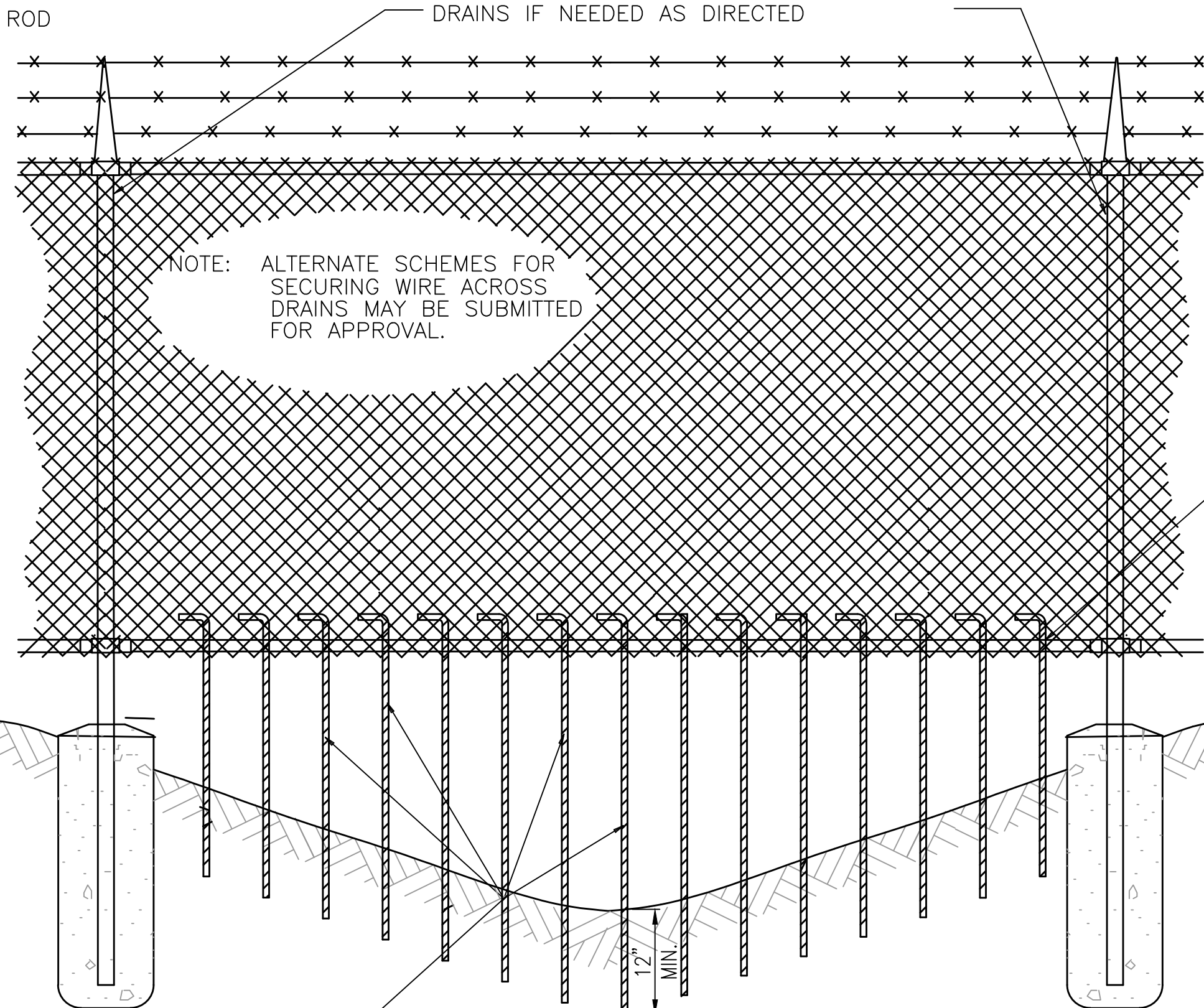
SAWED NOTCH
3/16"-1/4" WIDE
1/8" AT EACH
BARBED WIRE STRAND

1/2" Ø ROD

ELEVATION

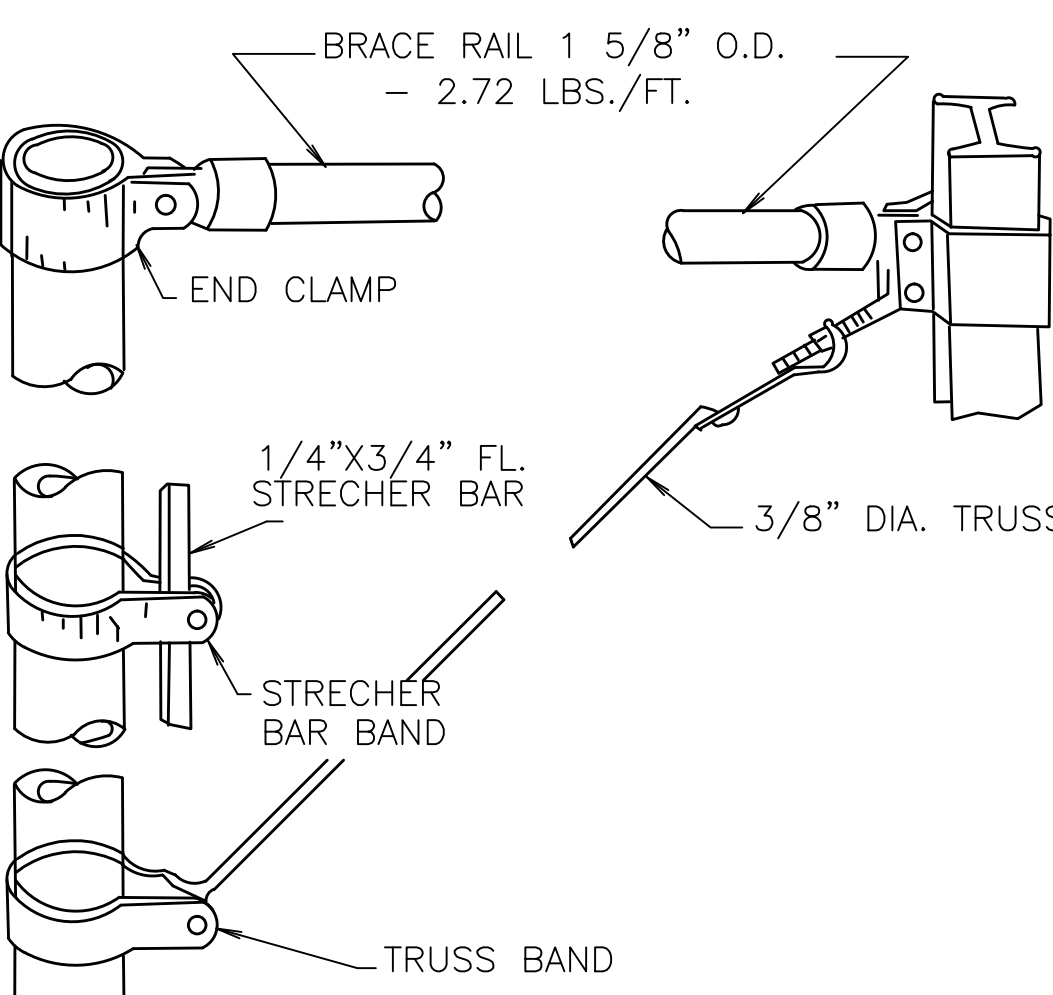
EXTRA LENGTH POSTS SHALL BE USED AT
DRAINS IF NEEDED AS DIRECTED

NOTE: ALTERNATE SCHEMES FOR
SECURING WIRE ACROSS
DRAINS MAY BE SUBMITTED FOR
APPROVAL.



#4 REBAR @ 6" SPACING
MIN. OR AS DIRECTED BY
THE ENGINEER TO FIT
DRAINAGE CONDITIONS.

FENCE ARRANGEMENT AT SMALL DRAINS



END, GATE AND BRACE POST CONNECTIONS

REV	DATE	DESCRIPTION	DESIGNED BY	CHECKED BY	IN CHARGE
1	10/22/2010	ISSUED FOR PERMIT	BSJ	BSJ	BSJ

Date: 10/22/2010

Checked By: RAN

Drawn By: BSJ

Sheet Number: C11.5

Total: 41

10/22/2010